

Work Order ID 141902***141902***

Page 1

Item ID: D3943-041

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Ground Handling Crank Assembly

Start Date: 2/19/2016 Start Qty: 6.00 ***6***

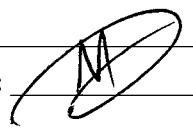
Cust Item ID:

Required Date: 3/4/2016 Req'd Qty: 6.00 ***6***

Customer:

Reference:

Approvals:

Process Plan: Date: 16-2-19

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr**Revision Nbr**

D3943

E

100

0.00

100

Purchasing

Purchasing

MemoIssue P/O: 31417

Purchase Part Number: 8143919

Supplier: Princess Auto

Certificate of conformity is required

Description: 4000 lbs lever chain hoist

0.00

FEB 19 2016

DAS
13
9-89

110

Receive & Inspect for Damage & Mat'l Certs

0.00

110

Packaging

Packaging

Memo

Ensure material certification is attached

0.00

FEB 24 2016

DAS
6
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																															
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Work Order ID 141902***141902***

Page 3

Friday, February 19, 2016 9:43:06 AM

Item ID: D3943-041 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Ground Handling Crank Assembly
Start Date: 2/19/2016 Start Qty: 6.00 ***6*** Cust Item ID:
Required Date: 3/4/2016 Req'd Qty: 6.00 ***6*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	Receive & Inspect for Damage & Mat'l Certs	0.00							
150									
Packaging	Memo	0.00							
Packaging									
152	QC5- Inspect part completeness to step on W/O	0.00							
152									
QC	Memo	0.00							
Quality Control									
160		0.00							
160									
Large Fab	Memo	0.03							
Large Fab	Using tool DT9854 compress flange on brake/clutch cover so that there is minimal "slop" in the chain hoist handle.								

6x Sp16-03-8

6 02/19/16-3-9

DAS
38
9-80
MAR 09 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
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Misidentified ☐	Past Due ☐																																																																

Work Order ID 141902***141902***

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Friday, February 19, 2016 9:43:06 AM

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
170	QC5- Inspect part completeness to step on W/O	0.00							
170									
QC	Memo	0.00							DAS 9 9-88
Quality Control									
180	Pick Kit	0.00							
180									
Packaging	Memo	0.00							
Packaging									

⑥ 16-04-05
6 2/16-3-9

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
				Completed By					
				Lead hand / Supervisor Approval Verification					
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Root Cause				FAULT CATEGORY			
Environment ☐	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐
Design ☐	☐	Operator	☐	Bending	☐	Set-up	☐
Doc/Data ☐	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐
Equip/Tooling ☐	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐
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Material ☐	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐
Internal Transport ☐	☐	Poor Information	☐	Crushing	☐	Countersink	☐
Tribal Knowledge ☐	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐
LOA ☐	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐
Substation ☐	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐
Past Expiry Date ☐	☐	Manufacturing Process	☐	OTHER : _____			
Misidentified ☐	☐	Past Due	☐				

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Page 5

Remove gear assembly cover (underside of chain hoist) and add enough general duty grease to cover entire gear assembly.
Apply LPS 3 to entire gear assembly and gear assembly cover so that a seal will be created when the cover is reinstalled
Reinstall gear assembly cover

6 2 / 6 - 9

6/18/22 1639

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order ID 141902

Friday, February 19, 2016 9:43:06 AM

141902

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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
200	QC5- Inspect part completeness to step on W/O	0.00							
200									
QC	Memo	0.00							DAS 9 9-89
Quality Control	1-Calibrate and tag as per dwg and QSI 008 4.4 ***Calibration Cert. filled out***								
210	Identify as per dwg & Stock Location: <u>PK</u>	0.00							
210									
Packaging	Memo	0.00							<u>6 54</u> APR 05 2016
Packaging									
220	QC21- Final Inspection - Work Order Release	0.00							
220									
QC	Memo	0.01							<u>ML5</u> APR 05 2016
Quality Control	SEE PAT SMITH FOR REPAIR ARC								
	ONCE SHIPPED OUT OF THE SYSTEM, BOTTOM UP COST TO REMOVE COST IN SYSTEM - ENSURE THERE IS NO STK ON PART PRIOR TO BOTTOM UP								

APR 05 2016

ML5 ~~9107 5 0 8 14~~

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	

Root Cause				FAULT CATEGORY																																																											
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																								OTHER : _____																																							

Picklist Print

Friday, February 19, 2016 9:43:11 AM

Page 1

Work Order ID: 141902

141902

Parent Item: D3943-041

D3943-041

Parent Item Name: Ground Handling Crank Assembly

Start Date: 2/19/2016

Required Date: 3/4/2016

Start Qty: 6.00

Required Qty: 6.00

Comments: IPP Rev:A New Issue 09-06-02 EC Verified By: JLM IPP RevB:
add DEO DD 09.11.18 verified by:JLM IPP Rev:C as per dwg
REV.C DD 10.02.22 verified by:EC IPP REV:D 11.08.16 AS PER
REV.E DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D4405-1		Manufactured	No			180	Each	16.0000	1	6			
D4405-1													
Eye And Fork Swivel													

Location	Loc Qty	Loc Code
WA002	16	
109615	6	
135621	10	

8143919		Purchased	No			110	Each	0.0000	1	6			
8143919													
Lever Chain Hoist													

D3943-051		Manufactured	No			180	Each	0.0000	1	6			
D3943-051													
Handle Assembly													

D3943-053		Manufactured	No			180	Each	0.0000	1	6			
D3943-053													
Chain Assembly													

D3943-3		Manufactured	No			180	Each	11.0000	1	6			
D3943-3													
Handle Extension													

Location	Loc Qty	Loc Code
ST512	9	
126320	9	
WA002	2	
101564	2	

4
2

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____ Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
OTHER : ☐									

Picklist Print

Friday, February 19, 2016 9:43:11 AM

Page 2

Work Order ID: 141902

141902

Parent Item: D3943-041

D3943-041

Parent Item Name: Ground Handling Crank Assembly

Start Date: 2/19/2016

Required Date: 3/4/2016

Start Qty: 6.00

Required Qty: 6.00



CBL-1240

Purchased No

180

f

476.1453

1

6

**

CBI-1240

Cable

Location

Loc Qty

Loc Code

GA

476.14526

m132518

476.14526

CBL-460

Purchased No

180

Each

184.0000

2

12

**

CBI-460

Loop Sleeve

Location

Loc Qty

Loc Code

GA

184

m131619

5

m132518

16

m133344

10

m133786

5

m133875

48

m133985

100

D3585-1

Manufactured No

180

Each

18.0000

1

6

**

D3585-1

Set Screw

Location

Loc Qty

Loc Code

GA

18

55705

18

D3949-041

Manufactured No

180

Each

9.0000

1

6

**

D3949-041

Remove Before Flight Flag Assembly

Location

Loc Qty

Loc Code

ST512

9

120269

3

136504

6

DAS
36
9-89

16/03/10

M130035 (6x)

DAS
36
9-89

16/03/10

12

EL 16.3-10

DAS
36
9-89

16/03/10

3
3

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																																																										
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

Picklist Print

Friday, February 19, 2016 9:43:11 AM

Work Order ID: 141902

141902

Parent Item: D3943-041

D3943-041

Parent Item Name: Ground Handling Crank Assembly

Start Date: 2/19/2016

Required Date: 3/4/2016

Start Qty: 6.00

Required Qty: 6.00

D3954-7

Manufactured No

180

Each

15.0000

1

6

D3954-7

Ratchet Lug

**

EL 1/6-25

Location

Loc Qty

Loc Code

ST063

15

109240

15

6

AN5-11A

Purchased

No

180

Each

141.0000

1

6

AN5-11A

BOLT

**

EL 1/6-3-10

Location

Loc Qty

Loc Code

over003

60

M134134

60

ST338

81

M133234

31

6

M134039

50

NAS1149F0563P

Purchased

No

180

Each

144.0000

1

6

NAS1149F0563P

Washer

**

EL 1/6-3-10

Location

Loc Qty

Loc Code

ST262

144

m133515

144

6

MS21042L5

Purchased

No

180

Each

598.0000

1

6

MS21042L5

Nut

**

EL 1/6-3-10

Location

Loc Qty

Loc Code

GA

146

m127813

146

ST007

400

m134055

400

6

ST303

52

m133790

52

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

Friday, February 19, 2016 9:43:11 AM

Work Order ID: 141902

141902

Parent Item: D3943-041

D3943-041

Parent Item Name: Ground Handling Crank Assembly

Start Date: 2/19/2016

Required Date: 3/4/2016

Start Qty: 6.00

Required Qty: 6.00

S1475 Purchased No 180 Each 0.0000 1 6

S1475

Spring

134385 x 6

**

EL 16-3-10

3408A59 Purchased No 180 Each 6.0000 1 6

3408A59

BALL PLUNGER

132804 x 6

**

EL 16-3-10

Location

Loc Qty

Loc Code

ST570

6

m132504

6

6

HX-15 Purchased No 180 Each 27.0000 1 6

HX-15

1/4-20 UNCx3/4 S.H.C.S.

**

EL 16-3-10

Location

Loc Qty

Loc Code

ST554

27

114383

13

117865

14

6

HX-16 Purchased No 180 Each 40.0000 3 18

HX-16

**

EL 16-3-10

Location

Loc Qty

Loc Code

ST554

40

117865

40

113771 x 6

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	

Root Cause				FAULT CATEGORY			
Environment ☐	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐
Design ☐	☐	Operator	☐	Bending	☐	Set-up	☐
Doc/Data ☐	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐
Equip/Tooling ☐	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐
Handling/Pre ☐	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐
Material ☐	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐
Internal Transport ☐	☐	Poor Information	☐	Crushing	☐	Countersink	☐
Tribal Knowledge ☐	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐
LOA ☐	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐
Substation ☐	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐
Past Expiry Date ☐	☐	Manufacturing Process	☐				
Misidentified ☐	☐	Past Due	☐				

ITEM No.	QTY -041	QTY -051	QTY -053	PART NUMBER	DESCRIPTION	PREFERRED SUPPLIER
1	X			D3943-041	GROUND HANDLING CRANK ASSEMBLY	
5	1	X		D3943-051	HANDLE ASSEMBLY	
6	1		X	D3943-053	CHAIN ASSEMBLY	
11		1		D3943-1	HANDLE	M/F HANDLE FROM DIS-ASSEMBLED ITEM 39
12	1			D3943-3	HANDLE EXTENSION	
13		1		D3943-5	PLATE	
14		2		D3943-7	STUD	
15			1	D3943-9	CHAIN	USE CHAIN SUPPLIED WITH ITEM 39
16			1	D4405-1	EYE AND FORK SWIVEL	
21	1			D2690-4	LANYARD	
22	1			D3585-1	SET SCREW	
23	1			D3949-041	REMOVE BEFORE FLIGHT FLAG	
24			1	D3954-5	CHAIN LUG	
25	1			D3954-7	RATCHET LUG	
26			1	D3954-9	GWT CHAIN PIN	
31	1			AN5-11A	BOLT	
32	1			AN960-516	WASHER	
33	1			MS21042L5	NUT	
39	1			8143919	LEVER CHAIN HOIST (POWER FIST)	PRINCESS AUTO / 4000 lbs CAPACITY
51	1			S-1475	SPRING	REID SUPPLY
52	1			3408A59	BALL PLUNGER	McMASTER CARR
53	1			HX-15	SOCKET HEAD CAP SCREW 1/4-20 UNC X 0.75 LG	HASKINS
54	1			HX-16	SOCKET HEAD CAP SCREW 1/4-20 UNC X 1.0 LG	HASKINS

RELEASED
2011-07-29

E	CHANGED D3945-3 MATL TO SS (B8-5); FINISH NOW "NONE" (A7-5); TAP DRILL FOR 1/4-20 UNF-2B WAS PILOT HOLE NOTE (B1-5). PER PAR11-113.	MB	11.07.27
D	SHT 1 PL, ITEMS 51-54 RENUMBERED SEE PREV. REV. FOR DETAILS, ITEM 16 ADDED (VIEWS UPDATED). SHT 2 ZN D3 FLAG RELOCATED. SHT 3 ZONE D3, Ø0.12 HOLE DELETED. (SEE NCR 11-495)	AJS	11.05.16
C	RMV FINISH -041 (ZN A8-2), ADD NEW FINISH -051/-053/-1/-3 (A8-3/-4/-5), ADD CALIBRATION (A8-2), (1) HX-16 WAS HX-15 (B3-1, C3-1), PAR 10-001	CP	10.01.26
B	SHT 1 PL, ITEM 31 WAS AN4-10A, ITEM 32 WAS AN960-416, ITEM 33 WAS MS21042-4, ITEM 43 WAS 0.75 LG. SHEETS 2 - 5 NOTES: FINISH FOR ALL COMPONENTS NOW YELLOW SPRAY PAINT.	AJS	09.10.15
A	NEW ISSUE	AJS	09.05.13
REV.	DESCRIPTION	BY	DATE
DESIGN	DSTON / AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	ASS	DRAWING NO.	REV. E
CHECKED	ASS	D3943	SHEET 1 OF 5
MFG. APPR.	ASS	TITLE	SCALE
APPROVED	ASS	GROSS WEIGHT TOW CRANK ASSY	NTS
DE APPR.	N/A	COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	
DATE	11.07.27		

16-2-19
141902

REMOVE AND RETAIN
RUBBER HAND GRIP

AN5-11A BOLT
AN980-516 WASHER
MS21042L5 NUT

RE-INSTALL
RUBBER HAND-GRIP
HERE

D3943-3
HANDLE EXTENSION

D2690-4 LANYARD

C

D3949-041 FLAG

HX-16 S/H CAP SCREW

HX-15 S/H CAP SCREW
S-1475 SPRING

CALIBRATION TAG

D3585-1 SET SCREW

RE-INSTALL PIN

D3943-053 CHAIN ASSY

8143919
LEVER CHAIN HOIST

(CHAIN NOT SHOWN FOR CLAIRTY)

8143919 LEVER CHAIN HOIST
(SHOWN PRIOR TO MODIFICATION)
(CHAIN SHOWN SHORTENED FOR CLARITY)

DISCARD PIN

RETAIN PIN

REMOVE &
DISCARD HOOK

REMOVE & DISCARD HOOK

RELEASED
2011-07-29
JN

(CHAIN SHOWN SHORTENED FOR CLAIRTY)

D3943-041 GROUND HANDLING CRANK ASSEMBLY

NOTES -041:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3943-041" USING FINE POINT PERMANENT INK MARKER
- 7) CALIBRATION TAG PER DART QSI 008 4.4 (ZN C1-2)

DESIGN	DSTOW / AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	ASS	DRAWING NO.	REV. E
CHECKED	ASS	D3943	SHEET 2 OF 5
MFG. APPR.	ASS	TITLE	SCALE
APPROVED	ASS	GROSS WEIGHT TOW CRANK ASSY	NTS
DE APPR.	N/A	COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	
DATE	11.07.27		

D3943-1 HANDLE

2 PL

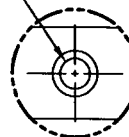
9.75

2.00

Ø0.31
THRU

D3943-7 STUD
2 PL

THREAD 1/4-20 UNC-2B
THRU



VIEW A-A A5-3
(SCALE 2X) B5-3

2 PL

9.38
REF

A B1-3

A B1-3

D3943-5 PLATE

D3943-051 HANDLE ASSEMBLY

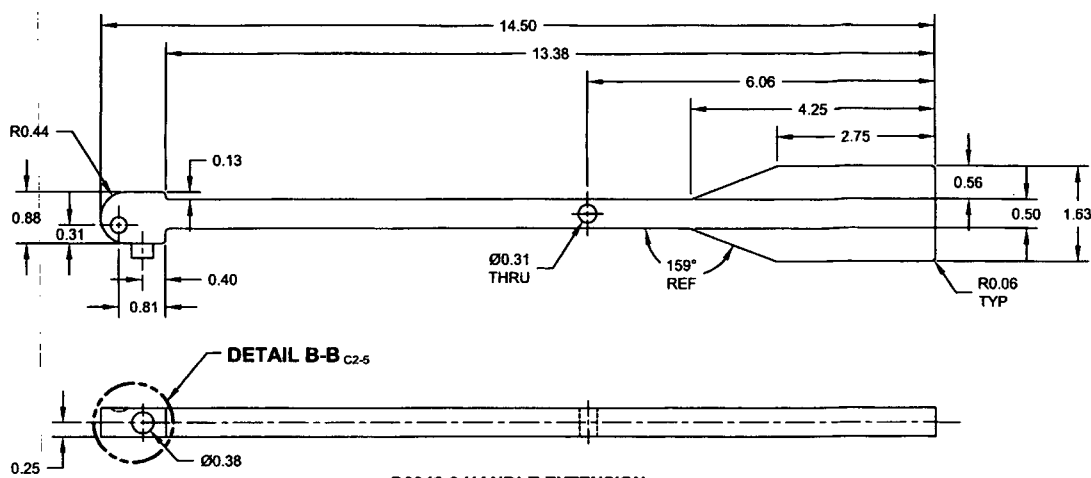
NOTES -051:

- 1) MATERIAL : N/A
- 2) FINISH: POWDER COAT HYBRID SAFETY YELLOW (4.3.5.12) PER DART QSI 005 4.3
- 3) TOLERANCES: X.XX DIMENSIONS +/- 0.06 ALL OTHERS
PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) MASK ALL THREADS PRIOR TO FINISHING

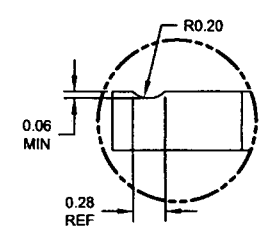
RELEASED
2011-07-20

DESIGN	DSTOW / AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN		DRAWING NO.	REV. E
CHECKED	ASS	D3943	SHEET 3 OF 5
MFG. APPR.		TITLE	SCALE
APPROVED		GROSS WEIGHT TOW CRANK ASSY	NTS
DE APPR.	N/A	COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	
DATE	11.07.27		

8 7 6 5 4 3 2 1

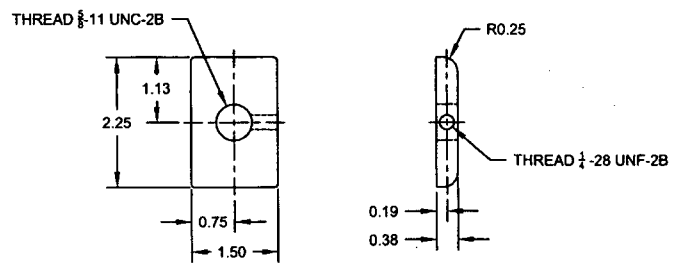


D3943-3 HANDLE EXTENSION

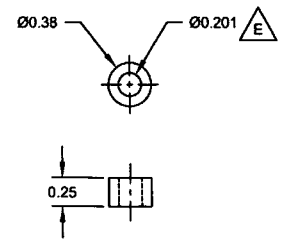


DETAIL B-B C7-5
(DIMPLE DETAIL)
(SCALE 2X)

- NOTES:**
- 1) MATERIAL -3: AISI 304/316 STAINLESS STEEL SHEET
ANNEALED 2B FINISH PER MIL-S-5059
OR AMS 5513 (304) OR AMS 5524 (316)
OR ASTM A240 OR ASME SA240
REF DART SPEC M304S
OR:
AISI 303 STAINLESS STEEL SHEET
ANNEALED 2B FINISH PER MIL-S-5059
ASTM A240 OR ASME SA240
REF DART SPEC M303S
 - 5: MILD STEEL, SHEET
AISI 1010-1025 OR ASTM A36/A366/A1008
OR CSA G40-21, 38W/44W/50W/60W/70W
REF DART SPEC M1010-S
OR:
MILD STEEL, BAR
AISI 1010-1025 OR ASTM A36/A366/A569/A570
OR CSA G40-21, 38W/44W/50W/60W/70W
REF DART SPEC M1010-B
 - 7: MILD STEEL, ROUND BAR
AISI 1018-1025
PER MIL-S-7097
REF DART SPEC M1018-R
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: N/A



D3943-5 PLATE



D3943-7 STUD
(SCALE 2X)

RELEASED
2011-07-29

DESIGN	DSTOW / AJS	DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>ASS</i>	DRAWING NO.	REV. E
MFG. APPR.	<i>ASS</i>	D3943	SHEET 5 OF 5
APPROVED	<i>MA</i>	TITLE	SCALE
DE APPR.	<i>N/A</i>	GROSS WEIGHT TOW CRANK ASSY	NTS
DATE	11.07.27	COPYRIGHT © 2009 BY DART AEROSPACE LTD	
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8 7 6 5 4 3 2 1

PARCEL PACKING LIST

Page 1

From

E-FULFILLMENT CENTRE
8620 ESCARPMENT WAY
MILTON ONTARIO
L9T 0M1

To

Dart Aerospace Ltd
1270 Aberdeen St
PO # 31417

Hawkesbury ON
K6A 1K7 CAN
613-632-9577

Order Number 020490330010000
Parcel Weight 180.840

Parcel Number 04069670
PP#: 143651

ASCENT Parcel #



BOSS Parcel #



PUROLATOR

Container:

Item	Description	Qty Shipped
8143919	HOIST CHAIN 2 TON LEVER	RCV-001-01 6

16/12/01
JX



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO31417

Purchase Order Date 2/19/2016

PO Print Date 2/19/2016

Page Number 1 of 1

Order From :

VC-PRJ001

Ship To : DART AEROSPACE LTD

PRINCESS AUTO LTD.
P.O. BOX 1005
WINNIPEG, MB R3C 2W7
CA

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

E-M

Contact Name

Vendor Phone 613 247 1651

Ship To Contact

Ship To Phone

Ship Via: Purolator ground collect

Ship Acct:

Buyer

Customer POID

Customer Tax #

Terms

Currency

FOB

Chantal Lavoie

10127-2607

Net 30

CAD

Destination-Collect

FEB 19 2016

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	8143919 AS PER DWG D3943 REV. E B141902	Lever Chain Hoist	2/26/2016 Yes 2/26/2016		6.00 Each	\$179.99	\$1,079.94
						Line Total:	\$1,079.94
2	71401-45 Procurement Quality Clauses A005 RIGHT OF ENTRY A026 CERTIFICATION OF MATERIAL CONFORMANCE A040 NOTIFICATION OF QUALITY ESCAPE A042 DART NOTIFICATION BY SUPPLIER A043 RETENTION OF QUALITY DOCUMENTS	PROCUREMENT QUALITY CLAUSES	2/26/2016 No 2/26/2016		1.00	\$0.00	\$0.00
						Line Total:	\$0.00
						PO Total:	\$1,079.94

U cL

Note: Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Change Nbr: 2

Change Date: 2/19/2016



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO31533**

Purchase Order Date 2/29/2016

PO Print Date 2/29/2016

Page Number 1 of 1

Order From :

VC-IMI001

Ship To : DART AEROSPACE LTD

IMI MANUFACTURING INC.
772 MAIN ST. E.P.O. BOX 3
HAWKESBURY, ON K6A 2R4
CA

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

MAR 01 2016

E-MAILED

Contact Name

Vendor Phone 613 675 1208 Ext.223

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Ship To Contact

Ship To Phone

Terms

Net 30

Ship Via:

Dart Truck

Currency

CAD

Ship Acct:

FOB

Destination-Collect

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	141902 SANDBLAST PART	D3943-041 HANDLE	3/3/2016 Yes 3/3/2016		6.00	\$0.00	\$0.00

Line Total: \$0.00

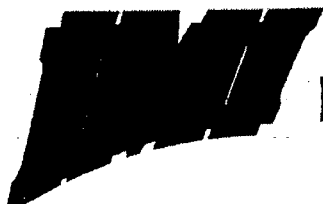
PO Total: \$0.00

PO Instructions: PROCUREMENT QUALITY CLAUSES
A000 CLAUSES NOT REQUIRED

Note: Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Change Nbr: 1

Change Date: 2/29/2016



Manufacturing Inc.

2056 County Rd #4, L'Original, Ontario K0b 1K0

Phone 613-675-1208

Fax 613-675-1250

PACKING SLIP

TO : DART AEROSPACE
1270 Aberdeen Street
Hawkesbury ON
K6A 1K7

Date : March 8/2016

SALESPERSON:		JOB #	PO NUMBER :	
		16-0067-22	31533	
QTY ORDER	DESCRIPTION		QTY SHIP	LINE TOTAL
1	Sandblast Part (Handle) ✓ Cox. D3943-041 Sp 16-03-8		1	

Client: (PRINT NAME) _____ (SIGNATURE) _____

THANK YOU FOR YOUR BUSINESS!

INTERNAL CALIBRATION CERTIFICATE

Instrument #	Description	Serial #
D3943-041	Ground Handling Crank Assembly	B141902

Calibrated by	Date of calibration	Calibrated with	Due	Certificate #
PD	01/04/16	Eng-07		

New tool	Disposed	In Repair	On Hold	Being Calibrated

Employee	Department	Comments:
N/A	N/A	MUST BE CALIBRATED WITH IN 1 YEAR OF PURCHASE OR FIRST OPERATION

Spec.	Tolerance is + /-	Result	Pass Fail
3500LBS	3500-3700LBS		Pass

Entered By:

Pat Duval